

# How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market: Evidence from Developing Asian Markets

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## Motivation

Asian economies have large populations and face key social and environmental development challenges. Sustainable finance has become critical to achieving environmental and social goals across the world. The global sustainable bond market reached a size of USD5.0 trillion in 2024, with Asia accounting for 21% of total bonds outstanding. However, the share of sustainable bonds in Asia's total bond market (2.3%) remains significantly below that of the European Union (EU) (8.2%). Given the region's fiscal constraints, enhancing private sector participation in sustainable finance is imperative to advance sustainable development. While sovereign sustainable bond issuance is growing in Asia overall, the share of sovereign issuance in sustainable bond markets is still relatively small compared to the EU.

The issuance of sovereign sustainable bonds not only finances environmentally and socially beneficial projects but can also contribute to the expansion of private sustainable bond financing by signaling government commitment, establishing taxonomies and reporting standards, and providing pricing benchmarks. While the importance of sovereign bonds in corporate bond market development is well established, empirical evidence on sovereign sustainable bonds' implications for corporate sustainable bond markets remains underexplored. Only a few studies highlight channels such as demonstration effects, investor confidence, and government signaling (see, for example, Cheng, Ehlers, and Packer 2022; Cheng et al. 2024), but systematic evidence remains scarce.

Focusing on eight developing Asian markets—Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand—this study investigates whether and how sovereign sustainable bond issuance affects the liquidity and pricing dynamics of corporate sustainable bond markets.<sup>17</sup> This study aims to (i) assess the impact of sovereign sustainable bond issuance on the liquidity (bid–ask spread) and yield spread of corporate sustainable bonds, (ii) examine the mechanisms through which sovereign issuance affects corporate sustainable bond markets, and (iii) provide evidence-based insights to inform public policy strategies in deepening sustainable finance in Asia. This study contributes to the literature by deepening our understanding of the role of sovereign sustainable bonds in scaling private sustainable finance.

## Sample and Method

The study constructs a panel dataset of corporate sustainable bond data from 2018 to 2024. Empirically, this study adopts the panel vector autoregression model to estimate the interactions between sovereign sustainable bond issuance and the pricing dynamics of corporate sustainable bonds. The key dependent variables are (i) bid–ask spreads of corporate sustainable bonds, which capture liquidity; and (ii) yield spreads between corporate sustainable bonds and government bonds of the same denominating currency and tenor. The key independent variable of interest is sovereign sustainable bond issuance, captured by a dummy variable for a sovereign sustainable bond issuance debut, which refers to when the first sovereign sustainable bond was issued in an economy.

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This special section is an executive summary of a research paper in the *Asian Economic Policy Review* titled “[How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market: Evidence from Asian Markets](#).” This special section was written by the coauthors of the aforementioned paper, Seiwon Kim (professor at Ewha Womans University and president at Korea Capital Market Institute) and Sunjoo Yang (PhD candidate at Ewha Womans University), and by Resi Ong Olivares (consultant), Donghyun Park (economic advisor), and Shu (Grace) Tian (principal economist) at the Asian Development Bank, Manila.

<sup>17</sup> Each of these markets has issued sovereign sustainable bonds.

To understand the sources of reaction of corporate sustainable bond yield spreads to the first sovereign sustainable bond issuance in a market, this study further decomposed yield spreads into (i) a “greenium” to capture the yield difference between a sustainable corporate bond and a conventional reference corporate bond with similar pricing attributes (e.g., rating, tenor, and denominating currency); and (ii) a risk premium that measures the yield difference between the reference conventional corporate bond and government bond with the same tenor and denominating currency. The study further investigates the possible working channel through which a sovereign sustainable bond issuance influences a corporate sustainable bond market by assessing (i) supply side changes in corporate sustainable bond markets after the first sovereign sustainable bond issuance, and (ii) the demand for sustainable assets, proxied by flows into environmental, social, and governance mutual funds after the first sovereign sustainable bond issuance.

## Key Findings

### Liquidity

The debut of sovereign sustainable bond issuance leads to a short-run improvement in corporate sustainable bond liquidity, as reflected in narrower bid–ask spreads. As shown in **Table 2**, the effect becomes significant as the horizon lengthens, indicating that liquidity gains are not short-lived but cumulative. Monthly and quarterly data allow for more significant liquidity improvement to accumulate over time. However, liquidity improvement affected by a single sovereign sustainable bond issuance cannot be sustained as investors adjust their portfolios, which requires deeper investor participation and greater market depth.

**Table 2: Dynamic Properties of Sovereign Sustainable Bond Introduction on Bid–Ask Spreads**

	Daily	Monthly	Quarterly
Short-run effect	-0.0003 (0.0002)	-0.0048* (0.0025)	-0.0232*** (0.0087)
Long-run effect	-0.0110	-0.0859	-0.1255
Mean lag	5.3 days	4.9 days	7.5 days

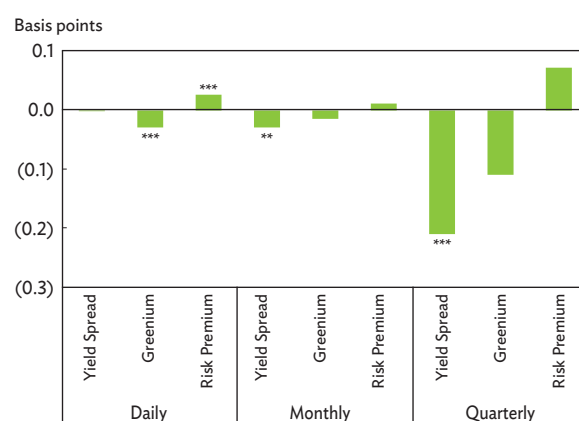
Notes: The values in parentheses are heteroskedasticity robust standard errors. \* and \*\*\* represent significance at the 10% and 1% levels, respectively.

Source: Kim, S., R. Olivares, D. Park, S. Tian, and S. Yang. 2025. *How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market? Evidence from Asian Markets*. *Asian Economic Policy Review*.

### Yield Spread

Our findings indicate that sovereign sustainable bond issuance reduces corporate sustainable bond yield spreads over the medium term (**Figure 16**). Similar to the liquidity evidence, the effect on yield spreads is not immediate but becomes statistically significant in the monthly and quarterly models, reflecting the gradual pricing in of the possible signaling and demonstration effects of sovereign sustainable bonds, which strengthens investor confidence and builds demand for sustainable assets. Yield spreads also display strong autoregressive dynamics, confirming that price adjustments in bond markets unfold gradually. Overall, the results imply that sovereign sustainable bonds contribute to lowering corporate sustainable bond financing costs over time.

**Figure 16: Impact of Sovereign Sustainable Bond Issuance on Corporate Yield Spreads, Greeniums, and Risk Premiums**



( ) = negative.

Note: \*\* and \*\*\* represent significance at the 5% and 1% levels, respectively.

Source: Kim, S., R. Olivares, D. Park, S. Tian, and S. Yang. 2025. *How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market? Evidence from Asian Markets*. *Asian Economic Policy Review*.

To examine the sources of the decline in yield spreads, we decompose them into a greenium and a risk premium. The results in Figure 16 show that improvement in the yield spread over the medium term is mostly driven by a lower greenium, which echoes improved investor sentiment and stronger demand for sustainable bonds following sovereign issuance. In contrast, the risk premium rises in the short run, reflecting liquidity adjustments and temporary portfolio rebalancing away from conventional reference corporate bonds, but this impact fades over the medium horizon. This suggests that the lasting impact of sovereign issuance operates mainly through the greenium.

## Underlying Mechanisms

Increased supply and demand contribute to enhanced liquidity and reduced financing costs in corporate sustainable bond markets.

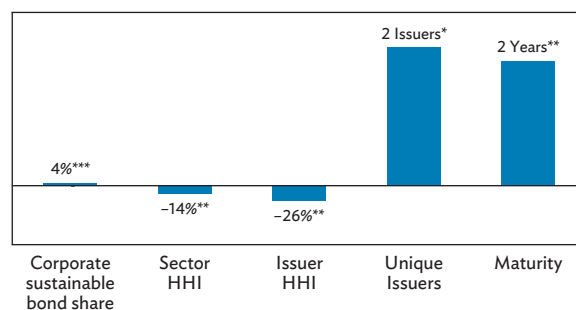
- On the supply side, a sovereign sustainable bond issuance debut leads to a higher share of sustainable bond issuance in corporate bonds, more unique issuers, greater market diversity in terms of sectors and issuers, and longer financing maturities in the corporate sustainable bond market (**Figure 17**). These outcomes suggest that sovereign issuance helps broaden and deepen corporate sustainable bond market participation.
- On the demand side, evidence shows an increase in fund inflows into exchange-traded environmental, social, and governance funds following the sovereign sustainable bond issuance debut, reflecting greater investor interest in broad sustainable assets (i.e., passive, rather than active, trading) (**Figure 18**).

## Policy Implications

The study yields some useful policy implications. Above all, it suggests that governments can effectively foster private sustainable finance with the issuance of sovereign sustainable bonds, which can promote pricing efficiency and lower financing costs in sustainable bond markets. Sovereign issuances act as a powerful signal of commitment to sustainable finance by boosting market confidence, as sovereign sustainable bonds help reduce related policy uncertainty and assure investors. Sovereign issuances can also boost supply and promote market development by setting pricing benchmarks, enhancing reporting transparency, defining sustainable bond standards and taxonomies, and providing demonstration effects.

To maximize the catalyzing impact, governments should adopt an integrated policy design that complements sovereign sustainable bond issuance with robust regulatory frameworks and fiscal incentives for issuers to mobilize private capital. The policy implications are relevant for emerging markets around the world. Evidence from developing Asia, where sustainable bonds account for a small fraction of the general bond market, implies

**Figure 17: Impact of Sovereign Sustainable Bond Issuance Debut on the Supply of Corporate Sustainable Bonds**

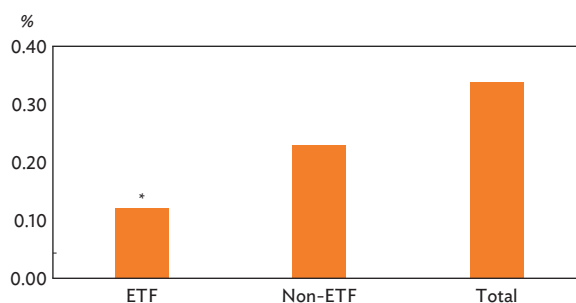


HHI = Herfindahl-Hirschman Index.

Notes: The corporate sustainable bond share is the amount of corporate sustainable bond issuance relative to total corporate bond issuance during the quarter. The HHI is a commonly accepted measure of market concentration. The index is used to measure the investor profile diversification of the region's local currency bond market and is calculated by summing the squared share of each investor group in the bond market. Maturity is the size-weighted maturity in years of sustainable bonds issuance. \*, \*\*, and \*\*\* represent significance at the 10%, 5%, and 1% levels, respectively.

Source: Kim, S., R. Olivares, D. Park, S. Tian, and S. Yang. 2025. [How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market? Evidence from Asian Markets](#). *Asian Economic Policy Review*.

**Figure 18: Impact of Sovereign Sustainable Bond Issuance Debut on Demand for Corporate Sustainable Bonds**



ETF = exchange-traded fund.

Notes: Total refers to net inflows into environmental, social, and governance (ESG) funds investing in sample markets from global sources, scaled by the funds' total net assets. It is broken down into inflows to exchange-traded ESG funds and non-exchange-traded ESG funds, each scaled by their respective net assets. \* represents significance at the 10% level.

Source: Kim, S., R. Olivares, D. Park, S. Tian, and S. Yang. 2025. [How Sovereign Sustainable Bond Issuance Shakes Up the Corporate Sustainable Bond Market? Evidence from Asian Markets](#). *Asian Economic Policy Review*.

that in all global emerging markets where sustainable bond markets are underdeveloped, governments can strategically use sovereign participation to scale up private sustainable finance and, more broadly, the development of bond markets and sustainable finance.

## References

- Cheng, G., T. Ehlers, and F. Packer. 2022. Sovereigns and Sustainable Bonds: Challenges and New Options. *BIS Quarterly Review*. September. pp. 47–56.
- Cheng, G., T. Ehlers, F. Packer, and Y. Xiao. 2024. Sovereign Green Bonds: A Catalyst for Sustainable Debt market Development?" *International Monetary Fund Working Paper*. No. WP/24/120.
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